

Amendments to the Claims:

Please amend claims 2, 6, 9, and 12 and cancel claims 1, 5, 8, 10, and 11 as shown in the below listing of claims. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

Claim 1 (canceled).

2. (currently amended) An xDSL modem comprising:
a hybrid circuit for interfacing a twisted pair transmission line to a receiver and also
to a transmitter, wherein
the hybrid circuit is provided with an adjustable termination impedance ~~The xDSL~~
~~modem of claim 1,~~ wherein
the adjustable termination impedance comprises a multiplexer configured to
selectively connect at least one transformer of said hybrid circuit to at least
one discrete component.

3. (original) The xDSL modem of claim 2, wherein
the adjustable termination impedance comprises a multiplexer configured to
selectively connect a pair of transformers of said hybrid circuit to at least
two discrete components.

4. (original) The xDSL modem of claim 2, wherein
the multiplexer is connected to a controller configured to provide a signal to cause
the multiplexer to selectively connect said at least one discrete component.

Claim 5 (canceled).

6. (currently amended) An xDSL modem comprising:
a hybrid circuit for interfacing a twisted pair transmission line to a receiver and also
to a transmitter, wherein
the hybrid circuit is provided with an adjustable termination impedance and
comprises first and second transformers, said first transformer being
connected to said receiver and said second transformer being connected to

said transmitter, and wherein said first and second transformers are both connected to the adjustable termination impedance

~~The xDSL modem of claim 5~~, wherein the adjustable termination impedance comprises a multiplexer configured to selectively and simultaneously connect both of said first and second transformers to at least one discrete component.

7. (original) The xDSL modem of claim 6, wherein the multiplexer is connected to a controller configured to provide a signal to cause the multiplexer to selectively and simultaneously connect both of said first and second transformers to said at least one discrete component.

Claim 8 (canceled).

9. (currently amended) An xDSL modem comprising:
a hybrid circuit for interfacing a twisted pair transmission line to a receiver and also to a transmitter, wherein
the hybrid circuit is provided with an adjustable termination impedance comprising at least one linear device configured to change one of a resistance, a capacitance, or an inductance, in response to a variable voltage, and
~~The xDSL modem of claim 8~~, wherein said at least one linear device comprises one of a field effect transistor, a varactor, ~~an~~ and a gyrator.

Claims 10-11 (canceled).

12. (currently amended) A method of operating an xDSL modem comprising:
measuring at least one property of a communication channel connected to said modem;
changing a hybrid termination impedance based on a measurement of said at least one property;
determining at least one of a background noise profile of the channel, a channel loss characteristic and local echo power; and
changing a hybrid termination impedance based on a result of said determining step;
~~The method of claim 11~~, wherein the hybrid termination impedance is changed to one from a finite number of discrete hybrid termination impedance values.

- 13.* 13. (original) The method of claim 12, wherein the hybrid termination impedance is changed to a hybrid termination impedance value within a predetermined continuous range.
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